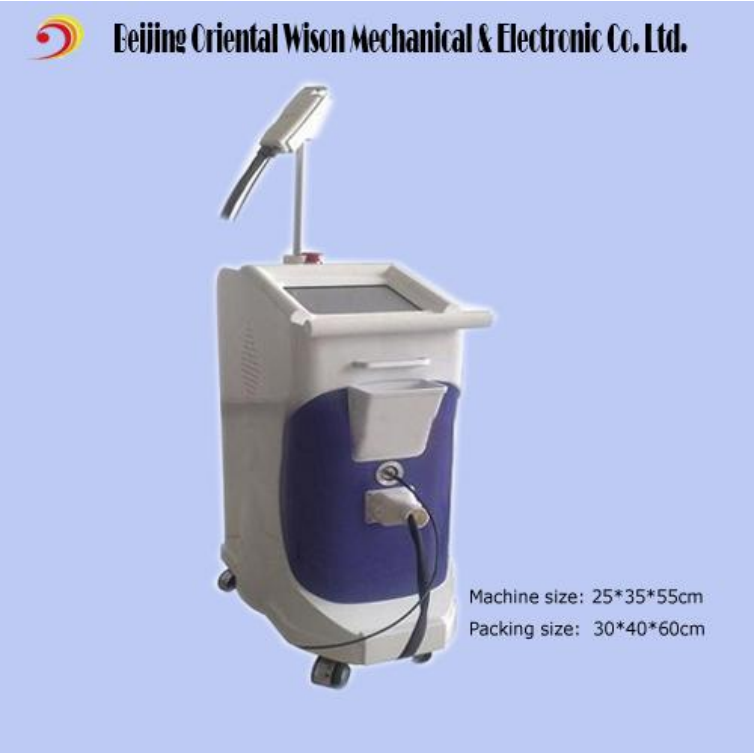
Long Pulse Laser



Beijing Oriental Wison Mechanical & Electronic Co., Ltd.

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Warning

Dangerous radiation can be possibly caused if don't control, adjust and operate the machine according to established procedure!

Please read the manual carefully to ensure understand the installation request and operation procedure before operating the machine. In addition, operator must fully understand the biochemical reaction between laser and human tissue.

Pull out the key when not in use in case any accident.

All of the operator must be strictly trained before operating the machine. (very important)

Lay people are prohibited to maintain the machine

Indications of Signs and Marks

This sign indicates laser product.

Warning Mark

Operator must read carefully if this sign is marked, and operate the machine in accordance with the required procedure.

Introduction Frame， there is introduction in the black frame on the machine shell， please pay attention.

1. Safety Warning

1.1 Electric Safety

Only manufacturer recommended components and accessories can be installed in the machine, otherwise can possibly malfunction the machine or cause accident.

High Voltage

Long Pulse Laser needs high voltage (can reach hundreds of voltage)which is dangerous to human body.

Avoid using the machine under flammable anesthesia gas, air mixed gas, oxygen and nitrous oxide. Some substance, such as cotton, if full contact with air, it can cause spontaneous combustion by the heat generated due to the normal operation of Equipment. So don’t operate the equipment until the stickiness and flammable solution of cleaning and disinfection devices completely volatilize.

Non-professionals are prohibited to install, debug and maintain the equipment. Don’t use the machine in the site of flammable and explosive substance. Don’t store flammable and explosive substance around the equipment. Flammable and explosive include: gasoline, alcohol, narcotics, solvents, desiccant, ointment and synthetic resin.

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1.2 Optics Safety

1. Burn

The maximum output energy of this equipment is 300J/cm2, which can cause severe burn, please pay enough attention.

2. Harm of the reflection and projectivity

The visible light output from this equipment does harm to eyes.

Never look at the light head directly, otherwise can cause unrecoverable blindness. Operator must be extremely cautious. Due to the surface of objects, especially glazed metal and glass can reflect the light, so this kind of items should not be placed on the paths where light will pass through. In other words, don't cast the laser light to the properties which can reflect the light in case the reflection and scattering will damage human eyes.

3. Laser Goggles

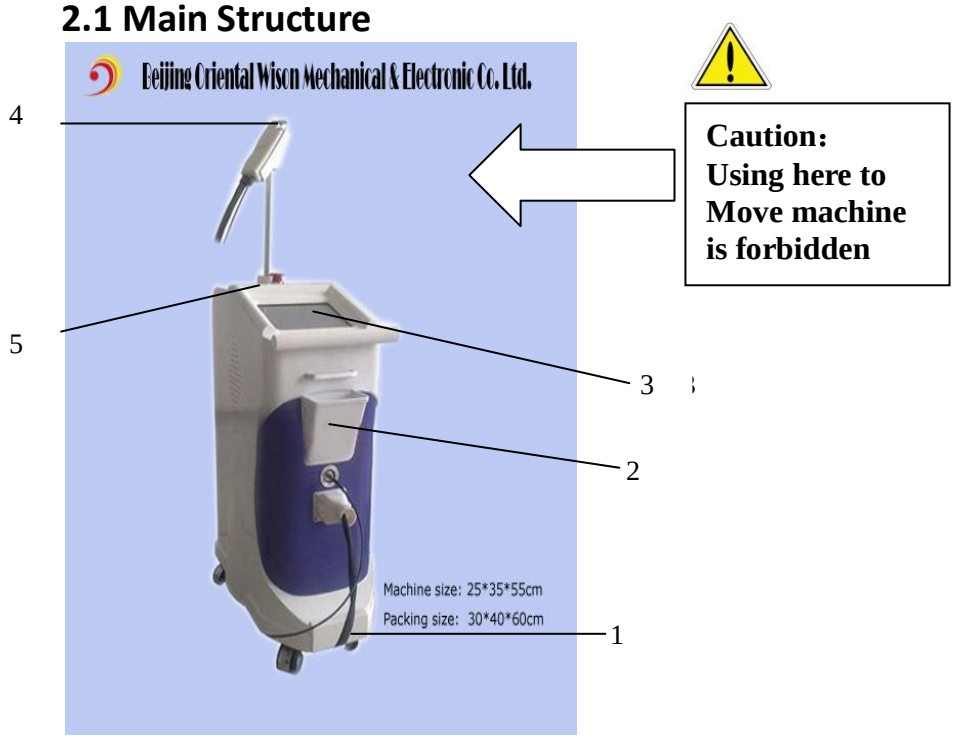
Laser goggles are designed to prevent eye damage by light, everybody at the surgery scene must wear laser protective goggles.

4. Patients' Safety

In order to protect the safety of patients, during facial beauty treatment, cover patients' eyes properly, during eye treatment, patients have to use eye protection shield.

2. Entire Machine Diagram

2.1 Main Structure



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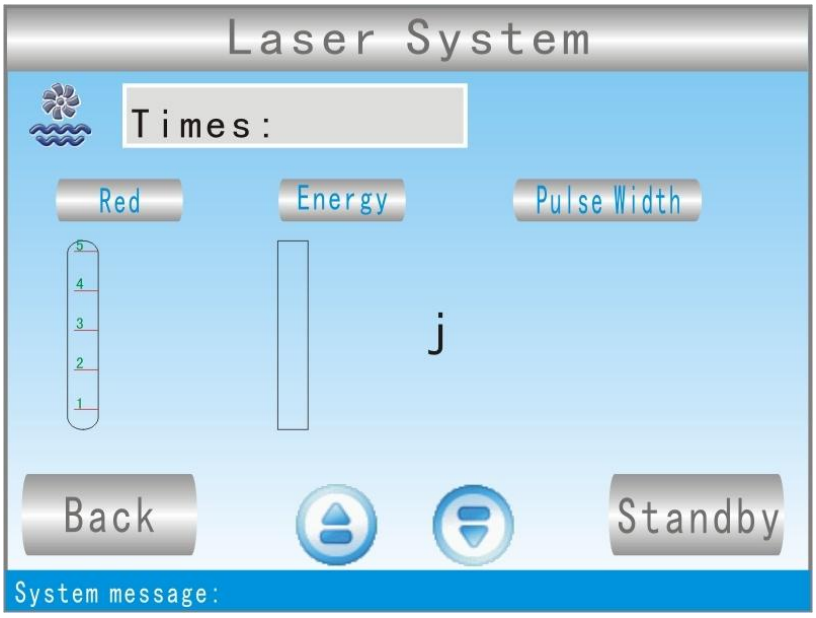
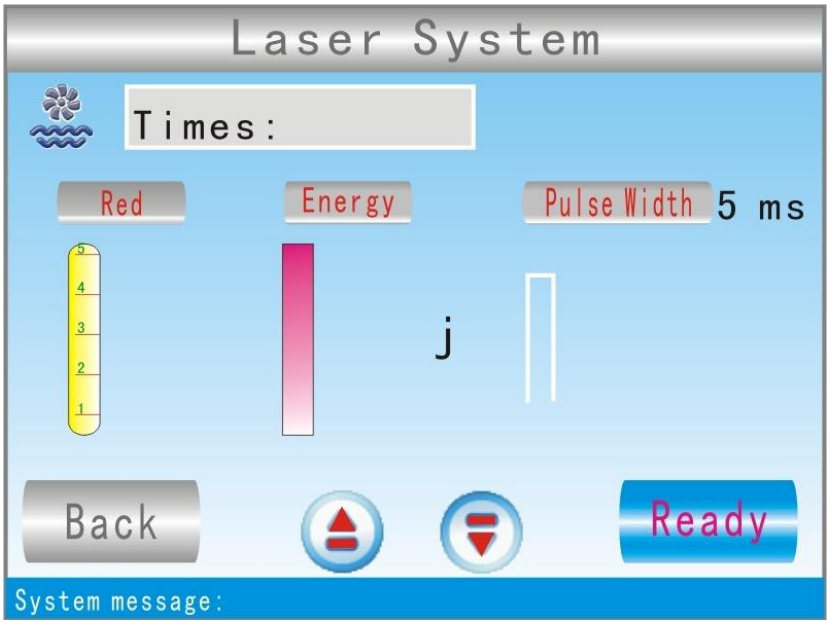
1. Caster: supporting the instrument.
2. Machine main body: instrument shell.
3. LCD screen and control panel: display the man-machine dialogue interface, setting the parameter, function and the relevant information of the beauty machine.
4. Headpiece: output the lasers for treatment.
5. Key switch: the main power switch of the instrument.

2.2 Control panel Diagram





5ms pulse width work mode.

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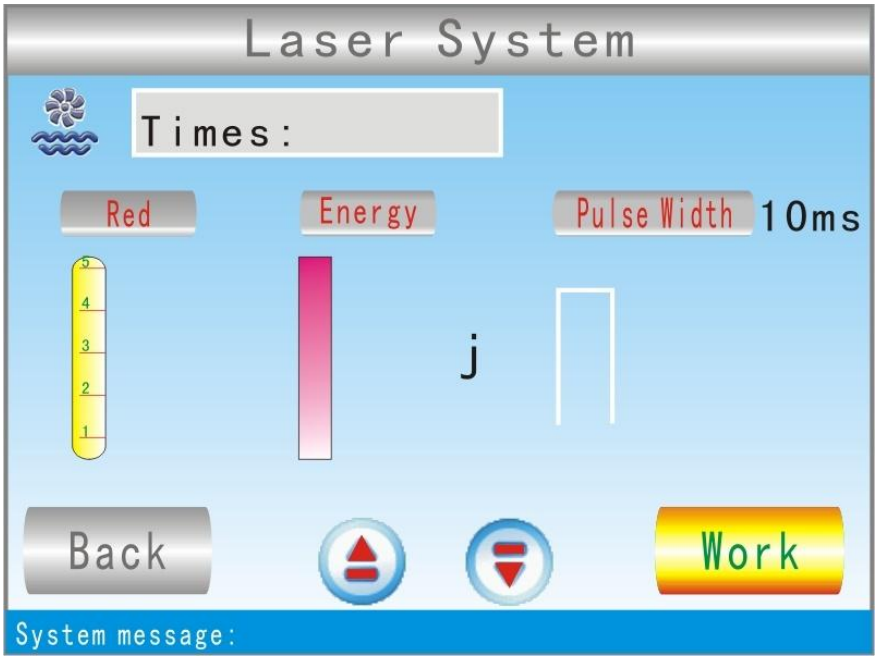
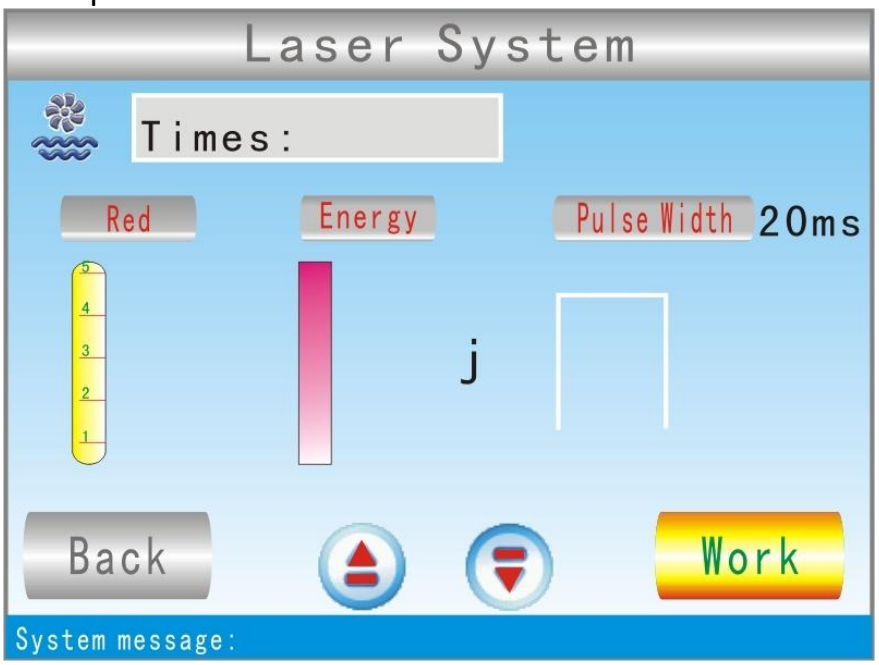


10ms pulse width work mode.



20ms pulse width work mode.

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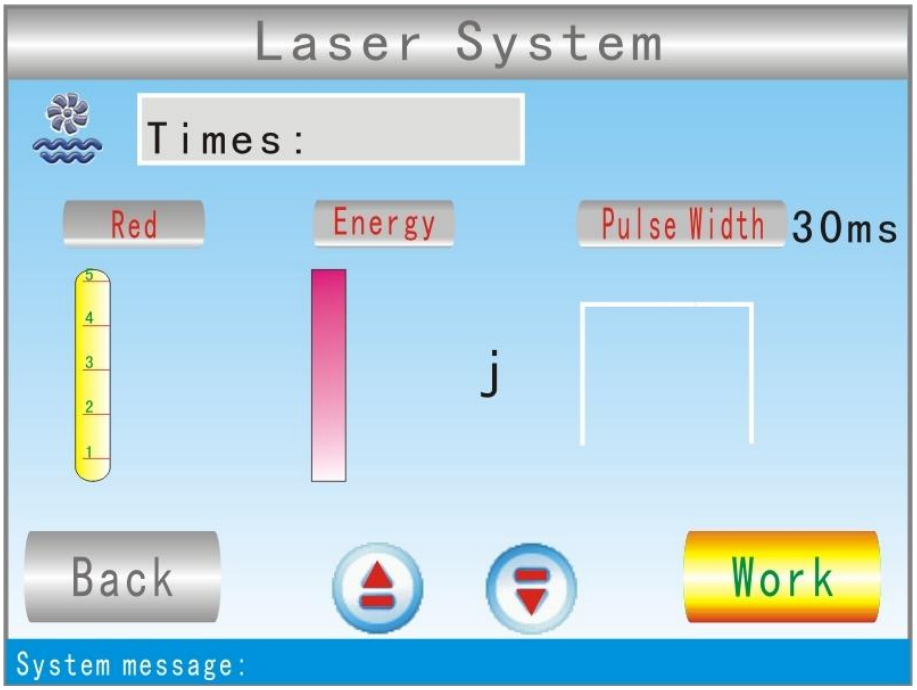

30ms pulse width work mode.

Remarks:

1. Red: this is for the infrared laser indicator. Press “Red”, and then press “up” for “on” an “down” for “off”.

2. Energy: this energy is for long pulse energy, from 20-300 adjustable. Press “Energy”, and then press “up” and “down” for setting.

3. Pulse Width: this is f or pulse width setting, from 5 - 30 adjustable. Press ” Pulse Width”, and then press “up” and “down” for setting.

4. Back: back to the welcome page.

5. Standby, Ready, Working: this shows the status for the machine.

3. Operating System

3.1 Accessories

Saturn TY-C0 Long Pulse Laser with accessories as follows：

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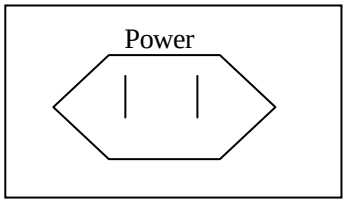
The headpiece	water funnel with rubber hose	User Manual
Goggles	Eye-patch	Pedal Switch
	Please contact us immediately if some of the accessories found missing or damaged.	
Key		Power Cord

3.2 Installation

Warning:
Installation of equipment should be available at 220V, 10A AC power, ground lead need to be there.

1. Installing the Power Cord

Make the power cord insert into the power socket back of the main machine, then the other end of the power cord insert the 220V power socket. As picture shown:



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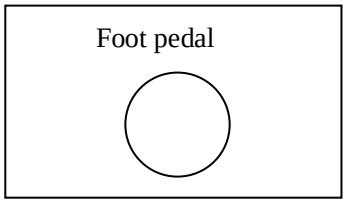
2. Connect Foot switch

Make the four core cord plug into the the foot switch socket in the back of main machine, then press the nut. As picture shown：



3. Installation of The laserguiding arm

Take out the laser guilding arm from the box. Install it on the top of the machine, a hammer weight will be install on the arm. adjusted the balance. As picture shown：

4. Filling Water

Warning:

This instrument is only suitable for filling distilled water, fill with normal water will affect the machine's energy output and service life Steam flow of water to ≦ 10 ℃ appropriate.

Before machine starting, be sure to fill the condensate water. As in the case of now water filling, can cause burning of the machine When filling water, make water inlet A, B open simultaneously, while plug the water outlet, filling condensation water through funnel with tube While observing water level changes, until a suitable location to stop filling water. As picture shown:

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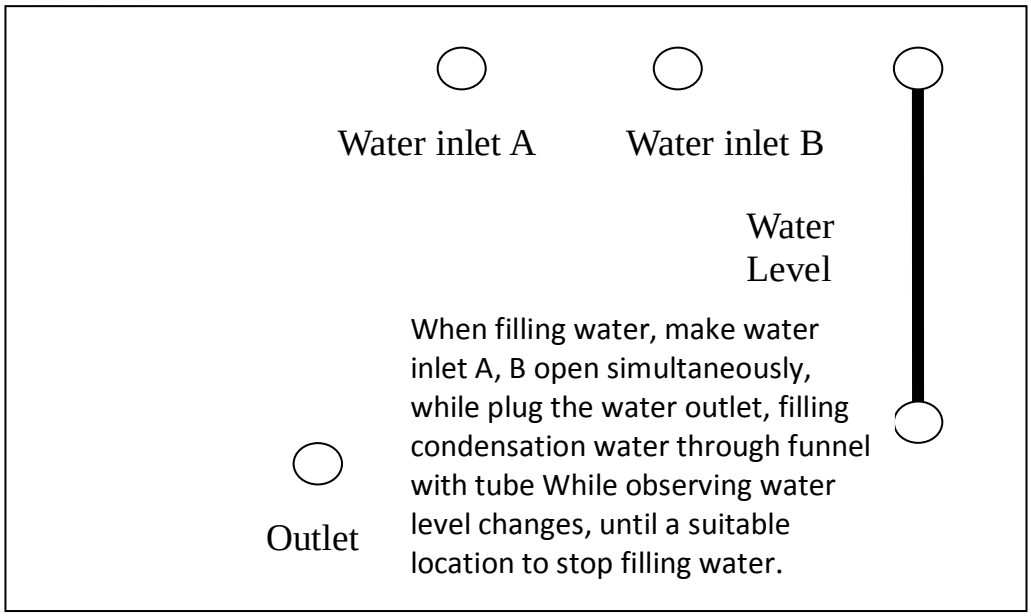
Water inlet A
Water inlet B
Water Level
When filling water, make water inlet A, B open simultaneously, while plug the water outlet, filling condensation water through funnel with tube While observing water level changes, until a suitable location to stop filling water.
Outlet

3.3 Operating system

Warning:
Long Pulse Laser must be operated by the doctor who has been trained and master professional knowledge.

Preparation

1. Keep the machine surface clean.
2. Take the equipment keys.
3. Provide laser protective goggles to everybody on the spot.
4. If general anesthetic is needed, please prepare a wet towel for the patient.
5. Prepare all necessary device and tools.

Move Equipment

Don't hit against wall, door or other objects when moving Long pulse Laser in case that the sharp vibration will damage the machine.

Boot-strap

Make sure power cord is connected correctly, firstly, switch on emergency switch, then insert the keys inside the key switch and twist it, equipment starts operating, As picture shown:

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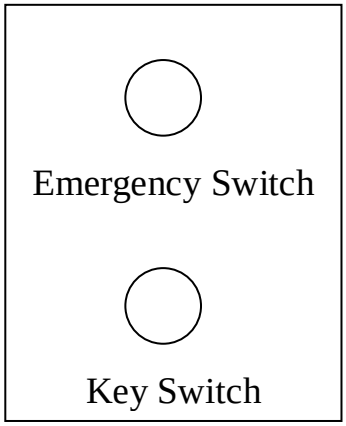

caution:

Whenever you find any abnormal situation, please immediately press emergency switch, cut off the power supply to ensure security.

Open the key switch, the machine will be into the state of self-inspect. Enter the interface.

Shut down

After turning off the key switch, must take the keys away, in case other people connect to the power apparatus, bring dangerous.

Treatment parameter

Scope of Illness / Skin Symptom		Depilate	Varication(tiny)
The skin is white Hair and capillary Colour is light	Power	25-28J	25-28J
	Pulse Width	10-20ms	5-10ms
Skin darker colour Hair and capillary Colour is medium	Power	25-26J	20-25J
	Pulse Width	10-20ms	5-10ms
Black skin Hair and capillary Colour is heavy	Power	20-23J	10-25J
	Pulse Width	5-10ms	5ms

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4. Specifications

Control system: digital color microcomputer system
Wave length: 1064nm
Max energy output: 300J /cm2
Pulse width: 5ms--30ms
Spot size: diameter 3mm--7mm adjustable
Laser conduct system: fiber conduct
Headpiece cooling: Yes
Indicator light: diode laser 650nm
Cooling system: water cooling system
Freon Compression + Water cooling system (5-35oC) (optional.)
Material: ABS material
Size: 250mm (W) x 300 mm (L) x 650 mm (H)
Voltage: AC220V/110V 10A 50/60HZ

5. Taboo Crowd

1. Mental disorders and mental healthy person;
2. Old men over aged 50 and older and the development of young immature;
3. Abnormal clotting mechanism, and menstruating women;
4. Secondary to other diseases caused by morbid obesity;
5. Who smoke, who stopped smoking less than two weeks;
6. Long-term use of anticoagulant drugs, antihypertensive drugs and hormone drugs, the withdrawal less than half of month;
7. Have internal organs diseases, such as cardiovascular disease, hypertension, coronary heart disease high cholesterol, high blood glucose;
8. Pulmonary respiratory insufficiency, such as chronic bronchitis, pulmonary insufficiency caused by;

6. Caution

1. Avoid direct sunlight to the instrument;
2. Instruments should be placed at a temperature below 40 ℃, no corrosive gases, less than 80% relative humidity environment;
3. Around of the instrument should be well ventilated, away from walls or obstructions shall not be less than 30cm;

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4. The instrument must use a separate power supply (AC 220V, 50Hz, 10A) and properly grounded;
5. Preceded transport equipment, need to stop working and release media. Moving equipment must be upright in the handling, such as the tilt angle must be greater than 45 degrees;
6. Refrigeration system shall not frequently be opened and stopped, or it may damage the compressor;
7. The products supply one year free warranty from the date of saling;

7. Warranty Liability

1. The machine's warranty for one year. During the warranty period, any customer in accordance with product label instructions and the requirements attached to the normal use of the malfunction, the company responsible for the free repair.
2. In specified warranty period, there is one of the following circumstances, does not get free repair

（1）Can not supply the warranty card and purchase certificate

（2）Warranty card with the actual information content in whole or in part of the record does not match; Loutian or altered

（3）Due to improper use or failure to label instructions and the requirements attached to operate and damage caused by the failure

（4）Because properly maintained, such as transport, movement and use of fall, bump and damage caused by the failure

（5）Cause of the accident such as abnormal voltage failure and damage

（6）Has not been designated or approved by the department and without maintenance, adjustment, modification and damage caused by the failure

（7）Consumables consumption, wear and tear, and replacement of aging

3. According to the merchandise, to ensure that the content provided is different. The specific warranty terms in the specification to be specified, the contents carefully recorded recognized. The machine's warranty for one year. In the proper use of the premise, such as damaged, the company responsible for the maintenance

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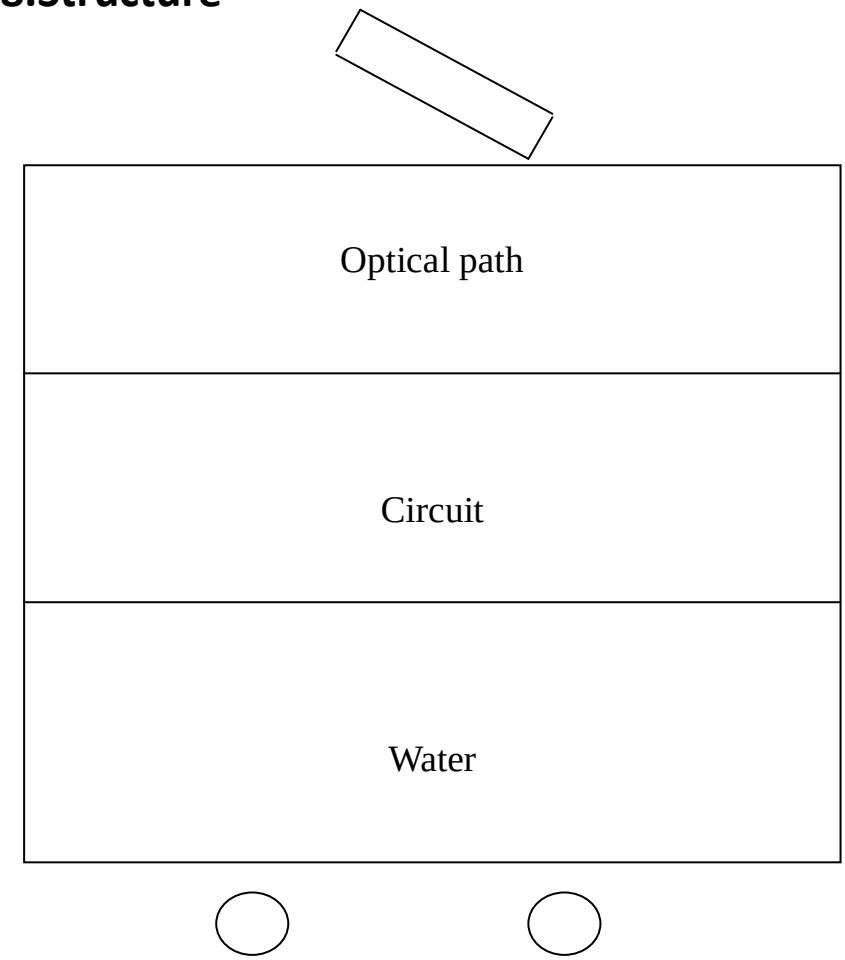
8.Structure



9. Schematics

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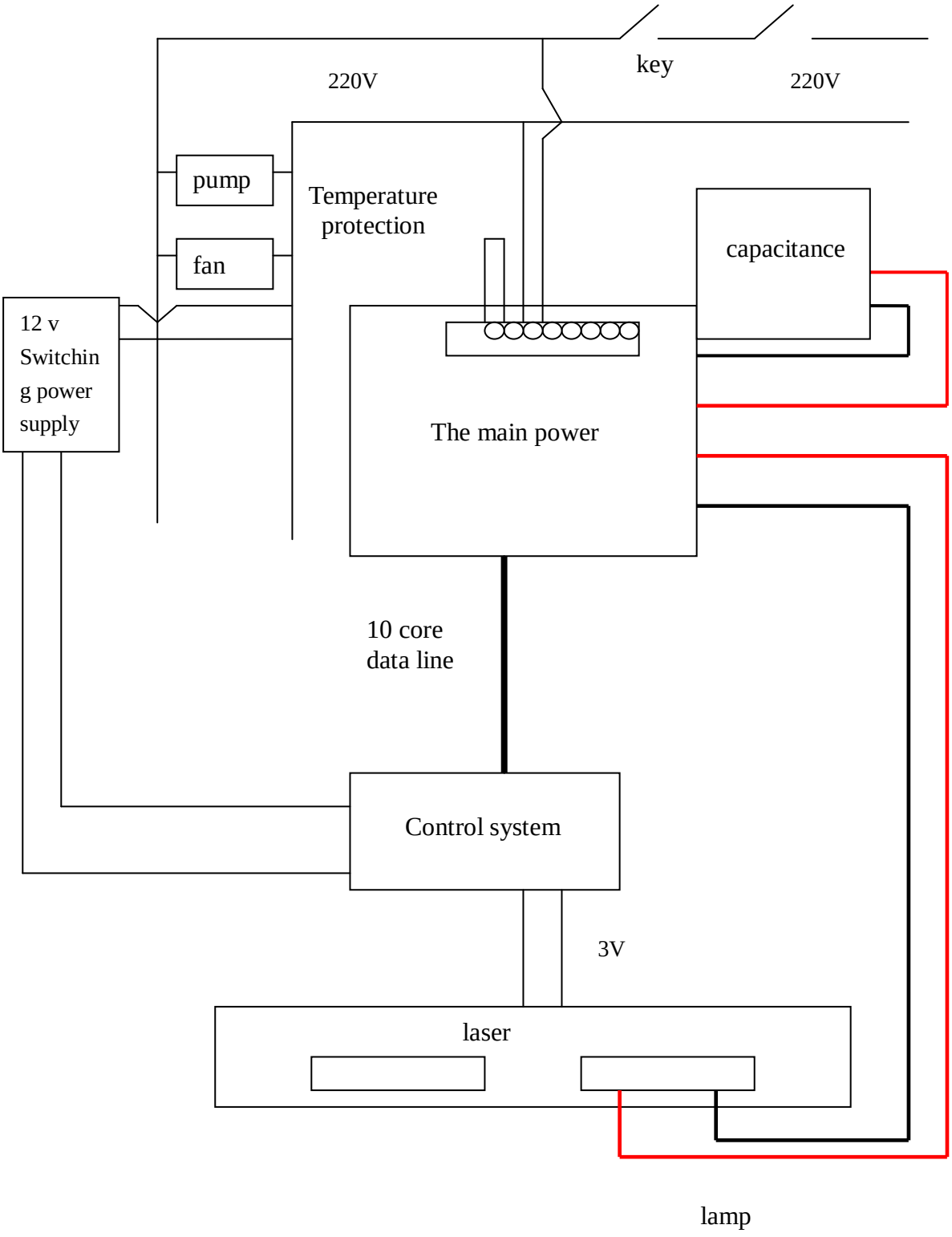
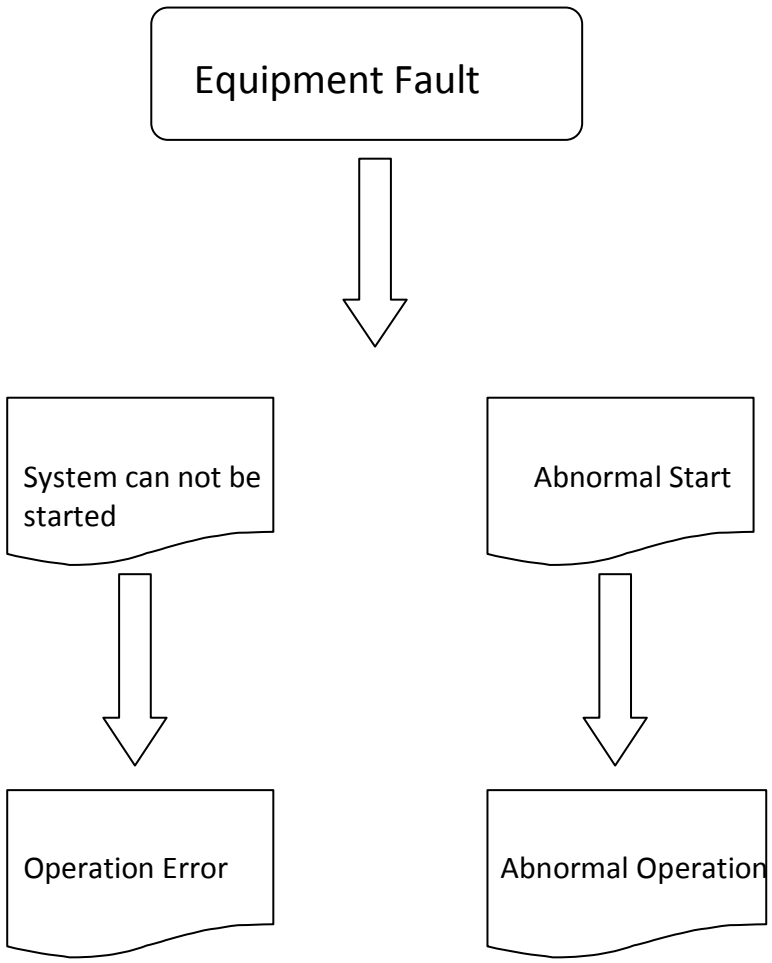


10 Fault Diagnosis

Warning

As a result of harm to human body by the light radiation during the process of operation, please read this manual carefully, understand relevant safety information and master some security measures to avoid accidents before using it.

10.1 Fault Catalog



10.2 Fault Diagnosis

System doesn't start

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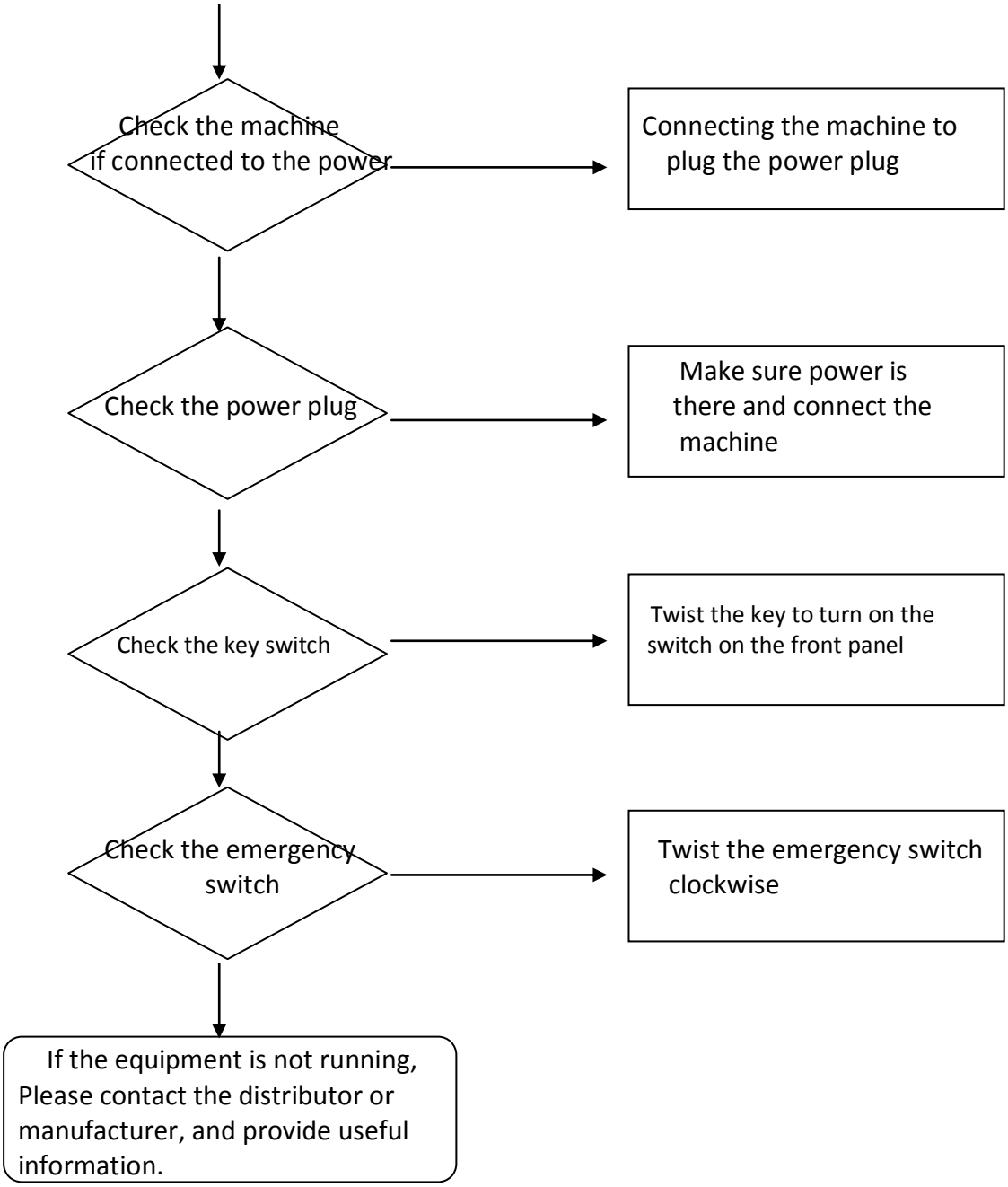
Check the machine if connected to the power
Connecting the machine to plug the power plug
Check the power plug
Make sure power is there and connect the machine
Check the key switch
Twist the key to turn on the switch on the front panel
Check the emergency switch
Twist the emergency switch clockwise
If the equipment is not running, Please contact the distributor or manufacturer, and provide useful information.

Failure during the process of operation

Failure 1: when equipment is started, operate the process according to the manual, but the set energy and spectrum can not be output.

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Possible Reasons：1）Computer Control Procedures Error
2）Equipment Light Path Error
3）Equipment Main Power Error

Failure 2: When equipment is started, operate the process according to the manual, the output energy is not sufficient.

Possible Reasons：1）Computer Control Procedures Error
2）High Voltage Source Damaged
3）High Voltage Source Degradation

Failure 3: When equipment is started, but control buttons fail.

1）Control Panel Damaged
2）Panel Buttons Damaged

Measures： Of the above circumstances, disconnect the power, restart the equipment and operate. If there are still faults, please contact with the distributor or manufacturer immediately, and don't operate the equipment.

Tel: 0086-10-81518268

Beijing Oriental Wison mechanical & Electronic Co., Ltd.

Quality Specification

Name	Long Pulse Laser
Type NO.	OW-G2.3
Specification	Single
Control system	Micro Digital Computer
Laser typle	ND: YAG laser
Product NO.	

Beijing Oriental Wison Mechanical & Electronic Co., Ltd.

T: 86 10 81518268 | F: 86 10 81533136 |

E: sbrina@iplchina.net.cn

W: www.iplchina.net.cn

Add: Room 516, #33 Building, Suzhou Str. Haidian district, Beijing, China

Beijing Oriental Wison mechanical & Electronic Co., Ltd.

Quality Inspection

Check items	Result	Remark
Facula	3mm～10mm	
Pulse Witdh	5ms～10ms	
Cooling temperature	5℃～35℃	
Max power	300J/cm²	
Test	Qualified	
Appearance	Qualified	

Factory inspection Qualified, Approved for release

Quality checker：_____

Quality Manager：_____

Beijing Oriental Wison mechanical & Electronic Co., Ltd

Quality Guarantee

T: 86 10 81518268 | F: 86 10 81533136 |

E: sbrina@iplchina.net.cn

W: www.iplchina.net.cn

Add: Room 516, #33 Building, Suzhou Str. Haidian district, Beijing, China

Caution:Be sure to fill in the form bolow and return right-page to us within 1 month, for the factory record.keep the left page for factory maintenance.Thanks for cooperation!

Front Page

Type NO.	OW-G2.3
Name	Long Pulse Laser
Product NO.	
Purchase Date	
Accept Date	

After Page

Type NO.	OW-G2.3
Name	Long Pulse Laser
Product NO.	
Purchase Date	
Accept Date	
User company	
Address	
Linkman	
Telephone	
Remark	1.Whether different to the packing list? 2.Whether abvious damage on appearance? 3.sugestion_____

Beijing Oriental Wison mechanical & Electronic Co., Ltd

Product AcceptanceList

company：

Brand		
Name	Long Pulse Laser	
Type NO.	OW-G2.3	
Specifaction	Single	
Product NO.		
Quantity	1set	
Order Date		
Receive Date		
Company Inspection	Result（Acceptance fill qualified, a failure fill specific issue）	
Quality problem and solve	suggestion	
	Result	
Remark	This list should return to factory for record signed by user company.	

Signature:_____

Date:_____

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Beijing Oriental Wison mechanical & Electronic Co., Ltd

Packing List

Product Name: Product Type：

NO.	Name	unit	quantity	remark
1	OW-G2.3	set	1	
2	Power line	piece	1	
3	Foot pedal	piece	1	
4	key	piece	2	
5	laser guiding arm	set	1	
6	Headpiece	piece	3	
7	funnel	piece	1	
8	Goggles	pair	2	
9	Quality specifiaction	piece	1	
10	Quality guarantee	piece	1	
11	Product acceptance list	piece	1	
12	Packing list	piece	1	

Above Parts checked completely!

Checker:_____

Date:_____

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